

Abstract of the Disclosure

A system and method for delivering increases speed, security, and intelligence to wireline and wireless systems. The present invention includes a new generation Fast Circuit Switch (packet/circuit) Communication processors and platform which enables a new Internet Exchange Networking Processor Architecture at the edge and core of every communication system, for next generation Web Operating System or Environment (WOE) to operate on with emphasis of a non-local processor or networking processor with remote web computing capabilities. A Unified Network Communication & Processor System or UniNet is a New generation network architecture of packet/circuit communication processors or Internet networking processor, that increases speeds over any communication channels and topologies, synchronizing, enabling, improving, controlling and securing all of the data transmission of web applications over existing wireline and wireless infrastructure while providing seamless integration to the legacy telecom & data com backbone. The present invention is capable of operating on any topology with distributed intelligence and data switching/routing, which is located at the edge. This method not only alleviates the ever increasing data processing bottleneck which is currently done by the data communication and telecom switch and routers, but it also enables new and next generation Internet Processor architecture. The UniNet is also a flexible solution for the novel concept that the capability of a network interface should depend on the level of service assigned to a service access point, not the capacity of the total network, such as transaction services with a short burst of messages with short access delay. The present invention increases channel capacity by using a parallel or multi-channel structure in such wireless and wireline at the edge or the core of. This new architecture of the present invention uses parallel bitstreams in a flexible way and distributed switching/routing technique, is not only to avoid the potential bottleneck of centralized switches, but also to increase speed with intelligence that is seamlessly integrating into the Fiber Optic Backbone such as WDM and SONET of the MAN/WAN network with a Real-time guarantees, different types of traffic (such as Stringent synchronous, isochronous, and asynchronous data messages) with different demands, and privacy & security of multi access and integrated services environment.